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MOTOROLA, INC.		EXAMINER			
1303 EAST ALGONQUIN ROAD		AGWUMEZIE, CHARLES C			
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.US@motorola.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/650,153	<b>Applicant(s)</b> COLLINS ET AL.
	<b>Examiner</b> CHARLES C. AGWUMEZIE	<b>Art Unit</b> 3685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 13 April 2010.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,5,6,8,11 and 19-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,5,6,8,11 and 19-33 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 01/10/06; 10/8/06
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

**Acknowledgements**

1. In view of Applicants' argument/amendment filed on April 13, 2010 the Non-FINAL Action mailed on January 15, 2010 is hereby WITHDRAWN and replaced with this Non-FINAL Action.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1, 5-6, 8, 11, and 19-33 have been considered but are moot in view of the new ground(s) of rejection.

However Applicant argues that the rejection under 101 is improper because the claimed invention is tied to another statutory class. Specifically that claim 1 recites that one number on an RFID tag is obtained by radio means while another number is electronically read.

In response Examiner asserts that none of the claims specifically states the machine which carries out the obtaining and/or the reading. Accordingly it is Examiner's position that the claimed invention is directed to non-statutory subject matter.

***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 1, 5-6, 8, 11, and 19-33**, are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter.

Based on Supreme Court precedent<sup>1</sup> and recent Federal Circuit decisions, § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing.<sup>2</sup> If neither of these requirements is met by the claim(s), the method is not a patent eligible process under 35 U.S.C. § 101. In addition, the tie to a particular apparatus, for example, cannot be mere extra-solution activity. See *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps.

To meet prong (1), the method step should positively recite the other statutory class (the thing or product) to which it is tied. This may be accomplished by having the claim positively recite the machine that accomplishes the method steps. Alternatively or to meet prong (2), the method step should positively recite identifying the material that is being changed to a different state or positively recite the subject matter that is being transformed.

In this particular case, claims 1, 5-6, 8, 11, and 19-33 fails both prong (1) because the “tie” (e.g. obtaining by radio means, electronically reading, utilizing and determining ) is representative of extra-solution activity and/or not tied to any particular machine or apparatus. Additionally, the claim(s) fail prong (2) because the method

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<sup>1</sup> *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

<sup>2</sup> The Supreme Court recognized that this test is not necessarily fixed or permanent and may evolve with technological advances. *Gottschalk v. Benson*, 409 U.S. 63, 71 (1972).

steps do not transform the underlying subject matter to a different state or thing.

Accordingly these claims are directed to non-statutory subject matter.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. **Claims 30-33**, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification as originally filed contains no support for “**wherein the fourth number does not contain product information of the item**” (claim 30); “**wherein the first number does not contain product information of the item**” (claims 31-33). There are new claims without support in the specification. This is the first instance of this invention that is unrelated and unsupported by the original filing. Cancellation of the new matter is required.

Applicant's amendments/arguments filed April 13, 2010 have been considered but are deemed without merit since the applicant argues an invention lacking support in the specification and based entirely on new matter.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1, 5-6, 8, 11, 19-25, 27-28 and 31-33**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kay U.S. Patent No. 6,223,166 B1 in view of Halperin et al U.S. Patent No. 6,226,619

9. As per claims 1 and 11, Kay discloses a method for determining if an item is a fraudulent item, the method comprising the steps of:

obtaining by radio means a first number associated with the item or item's packaging (*col. 4, lines 40-60, which discloses that a processor 39 receives an output from the receiver 37 and checks the bar code against an asymmetric key stored in a memory 40 and assigned to the event by the seller. Using an asymmetric key assigned by the seller to the event, the bar code is decoded and compared against an event description stored in the memory 40*);

electronically reading a second number printed on the item or packaging of the item (*see col. 4, lines 40-60, which discloses scanning a ticket 31 including a bar code 33 representing cypher code definitive*

*of the ticket information in an asymmetric cryptographic system);*

utilizing a public-key cryptographic process and contents of the RFID tag to cryptographically decide whether the second number is a public key signature of the first number (*see col. 4, lines 15-25, which discloses a digital signature may be included in the ticket. The digital signature is created by the seller recording a message in the ticket using his private key*); and

*determining authenticity of the item based on the result of the decision (col. 4, lines 40-60, which discloses that the bar code is decoded and compared against an event description stored in the memory 40. If the event description and decoded cypher code compare, the ticket is authenticated and the holder is granted admission to the event. If the event description and the decoded cypher code do not compare, the ticket holder is denied admission to the event)*

10. What Kay does not explicitly disclose is the use of RFID tag and the first number and the second number.

11. Halperin discloses the method comprising the use of RFID tags and the comparison of the first number and the second number (*fig. 1; col. 2, lines 50-55, which discloses that "the item includes indicia ... for comparison with a secret ... designating authenticity"; col. 4,*

*lines 30-40, which discloses that "the customer verify ... that the encrypted number carried by the tag corresponds to the unique serial number ", col. 7, lines 10-15, which discloses that "a unique signature is provided by the tag"; col. 7, line 65-col. 8, line 10)*

Accordingly it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Kay and incorporate a method comprising the RFID tag as a substitute for the memory device since both are memory devices for storing and reading information in view of the teachings of Halperin in order to ensure adequate security of the item by ensuring authenticity of the product

12. As per claim 5, Kay further discloses the method wherein the step of determining the item's authenticity comprises associating the item with an authentic item if the signature is verified, otherwise associating the item with a forged item (col. 4, lines 40-65).

13. As per claims 6, Kay further discloses a method of manufacturing a product in order to prevent forgery, the method comprising the steps of:

programming an anti-forgery RFID tag pre-programmed with an unalterable first number with a second number, the unalterable first number probabilistically rarely the same number as unalterable first numbers in other anti-forgery RFID tags;

determining a third number that is a cryptographic signature over the first and second numbers (*see col. 4, lines 15-25, which discloses a digital signature may be included in the ticket. The digital signature is created by the seller recording a message in the ticket using his private key*);

affixing the anti-forgery RFID tag comprising first and second numbers to either the product or the packaging associated with the product (*see col. 4, lines 15-25, which discloses a digital signature may be included in the ticket*); and

affixing the third number to either the product or the packaging associated with the product to either the product or the packaging associated with the product (*see col. 4, lines 15-25, which discloses a digital signature may be included in the ticket*).

**14. What Kay does not explicitly disclose is:**

programming an anti-forgery RFID tag pre-programmed with an unalterable first number with a second number, the unalterable first number probabilistically rarely the same number as unalterable first numbers in other anti-forgery RFID tags

Halperin discloses the method comprising:

programming an anti-forgery RFID tag pre-programmed with an unalterable first number with a second number, the unalterable first number probabilistically rarely the same number as unalterable first numbers in other anti-forgery RFID tags (small tag 2, figs. 1 and 2 comprising a first number (*fig. 1; col. 4, lines 5-15, which*

*discloses that "a tag is used that is preferably unique...that cannot be duplicated; col. 5, lines 55-65, which discloses "...number read from the tag ...")*

Accordingly it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Kay and incorporate a method comprising programming an anti-forgery RFID tag pre-programmed with an unalterable first number with a second number, the unalterable first number probabilistically rarely the same number as unalterable first numbers in other anti-forgery RFID tags in view of the teachings of Halperin in order to ensure adequate security and portability.

15. As per claim 8, Kay further discloses the method wherein the step of affixing the second number to either the product or the packaging associated with the product comprises the step of printing a cryptographic signature on the product or the product's packaging (see col. 4, lines 40-60)

16. As per claims 19 and 20, Kay further discloses the method wherein a bar-code is used for rendering the second number that is printed on the item or item's packaging (see col. 4, lines 30-40)

17. As per claim 21, Halperin discloses a method for determining if an item is a fraudulent item, the method comprising the steps of:

obtaining by radio means a first and second number from an RFID tag, wherein the first number is unalterable and unique or semi-unique and the second number is associated with the item (col. 4, lines 40-60, which discloses that a processor 39 receives an output from the receiver 37 and checks the bar code against an asymmetric key stored in a memory 40 and assigned to the event by the seller. Using an asymmetric key assigned by the seller to the event, the bar code is decoded and compared against an event description stored in the memory 40; see col. 4, line 60 - col. 5, line 15);

electronically reading a third number ((see col. 4, lines 40-60, which discloses scanning a ticket 31 including a bar code 33 representing cypher code definitive of the ticket information in an asymmetric cryptographic system));

utilizing a public-key cryptographic process and the first and second numbers to cryptographically decide whether the third number is a public-key signature of a combination of the first and second numbers (see col. 4, lines 15-25, which discloses a digital signature may be included in the ticket. The digital signature is created by the seller recording a message in the ticket using his private key); and

determining the authenticity of the item based on the result of the decision (col. 4, lines 40-60, which discloses that the bar code is decoded and compared against an event description stored in the memory 40.

*If the event description and decoded cypher code compare, the ticket is authenticated and the holder is granted admission to the event. If the event description and the decoded cypher code do not compare, the ticket holder is denied admission to the event)*

18. What Kay does not explicitly disclose is the use of RFID tag and the first number and the second number.

19. Halperin discloses the method comprising the use of RFID tags and the comparison of the first number and the second number (*fig. 1; col. 2, lines 50-55, which discloses that "the item includes indicia ... for comparison with a secret ... designating authenticity"; col. 4, lines 30-40, which discloses that "the customer verify ... that the encrypted number carried by the tag corresponds to the unique serial number ", col. 7, lines 10-15, which discloses that "a unique signature is provided by the tag"; col. 7, line 65-col. 8, line 10*)

Accordingly it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Kay and incorporate a method comprising the RFID tag as a substitute for the memory device since both are memory devices for storing and reading information in view of the teachings of Halperin in order to ensure adequate security of the item by ensuring authenticity of the product

20. As per claim 22, Ksy failed to explicitly disclose the method further comprising the step of: electronically determining whether the RFID is an anti-forgery RFID tag  
Halperin further discloses the method further comprising the step of:  
electronically determining whether the RFID is an anti-forgery RFID tag (see fig. 1).

Accordingly it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Kay and incorporate a method comprising the RFID tag as a substitute for the memory device since both are memory devices for storing and reading information in view of the teachings of Halperin in order to ensure adequate security of the item by ensuring authenticity of the product

21. As per claim 23, Kay failed to explicitly disclose the method, further comprising electronically determining whether a specific physical feature or a behavioral feature matches that of an anti-forgery RFID tag

Halperin further discloses the method, further comprising electronically determining whether a specific physical feature or a behavioral feature matches that of an anti-forgery RFID tag (col. 7, line 65-col. 8, line 10)

Accordingly it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Kay and incorporate a method comprising the RFID tag as a substitute for the memory device since both are memory devices for storing and reading information in view of the teachings of Halperin in order to ensure adequate security of the item by ensuring authenticity of the product

22. As per claims 24 and 28, Kay further discloses the method further comprising the step of: verifying that the second number is associated with the item (see col. 4, lines 40-60).
23. As per claim 25, Kay further discloses the method, wherein the verification is performed electronically using an optical scanner (see col. 4, lines 40-60).
24. As per claim 27, Kay further discloses the method, wherein the reading is performed by a bar code scanner (see col. 4, lines 40-60).
25. As per claims 32 and 33, Halperin further discloses a method, wherein the fourth number does not contain product information of the item (see fig. 1).
26. As per claim 31, Kay further discloses a method, wherein the first number does not contain product information of the item and the second number contains product information of the item (col. 4, line 60-col.5, line 15).
27. Claims 26, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kay U.S. Patent No. 6,223,166 B1 in view of Halperin et al U.S. Patent No. 6,226,619 as applied to claim21 above, and further in view of Coppersmith et al (hereinafter "Coppersmith") U.S. Patent No. 6,069,955

28. As per claim 26, Kay and Halperin failed to explicitly disclose the method further comprising the step of:

electronically determining whether the second number is an Electronic Product Code (EPC) of the item.

Coppersmith discloses the method further comprising the step of:

electronically determining whether the second number is an Electronic Product Code (EPC) of the item (see fig. 2).

Accordingly it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Kay and incorporate a method further comprising the step of: electronically determining whether the second number is an Electronic Product Code (EPC) of the item in view of the teachings of Coppersmith in order to ensure proper identification of the product.

29. As per claim 29, Kay and Halperin failed to explicitly disclose a method, wherein:  
'a third number is obtained from the RFID tag when the first number is obtained,  
'the third number is concatenated with, but a separate number than, the first number,  
the third number includes product information of the item, the public-key cryptographic process is used with the first and third numbers, and only if the public-key cryptographic process cryptographically decides that the second number is a public-key signature of the first and third numbers is the product determined to be authentic.

Coppersmith discloses:

a third number is obtained from the RFID tag when the first number is obtained, 'the third number is concatenated with, but a separate number than, the first number, the third number includes product information of the item, the public-key cryptographic process is used with the first and third numbers, and only if the public-key cryptographic process cryptographically decides that the second number is a public-key signature of the first and third numbers is the product determined to be authentic (see fig. 1; see claim 1).

Accordingly it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Kay and incorporate a method further comprising a third number is obtained from the RFID tag when the first number is obtained, 'the third number is concatenated with, but a separate number than, the first number, the third number includes product information of the item, the public-key cryptographic process is used with the first and third numbers, and only if the public-key cryptographic process cryptographically decides that the second number is a public-key signature of the first and third numbers is the product determined to be authentic in view of the teachings of Coppersmith in order to ensure security of the item.

**30.** As per claim 30, Halperin further discloses a method, wherein the fourth number does not contain product information of the item (see fig. 1).

### **Conclusion**

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles C. Agwumezie whose number is **(571) 272-6838**. The examiner can normally be reached on Monday – Friday 8:00 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin Hewitt can be reached on **(571) 272 – 6709**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charlie C Agwumezie/  
Primary Examiner, Art Unit 3685  
July 4, 2010